Commonwealth of Kentucky

Natural Resources and Environmental Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

AIR QUALITY PERMIT

Permittee Name: Osram Sylvania Products Incorporated

Mailing Address: 1000 Tyrone Pike, Versailles, Kentucky, 40383

Source Name: Same as above Mailing Address: Same as above

Source Location: 1000 Tyrone Pike

Permit Type: Federally-Enforceable

Review Type: Title V
Permit Number: V-99-023
Log Number: 50182 (F359)

Application

Complete Date: December 11, 1997

AFS Plant ID #: 21-239-00008

SIC Code: 3229

Region: Frankfort County: Woodford

Issuance Date: May 9, 2002 Expiration Date: May 9, 2007

> John S. Lyons, Director Division for Air Quality

TABLE OF CONTENTS

SECTION		<u>DATE</u> <u>OF ISSUANCE</u>	<u>PAGE</u>
SECTION A	PERMIT AUTHORIZATION	May 9, 2002	1
SECTION B	EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS	May 9, 2002	2
SECTION C	INSIGNIFICANT ACTIVITIES	May 9, 2002	23
SECTION D	SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS	May 9, 2002	25
SECTION E	SOURCE CONTROL EQUIPMENT OPERATING REQUIREMENTS	May 9, 2002	26
SECTION F	MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS	May 9, 2002	27
SECTION G	GENERAL CONDITIONS	May 9, 2002	30
SECTION H	ALTERNATE OPERATING SCENARIOS	May 9, 2002	37
SECTION I	COMPLIANCE SCHEDULE	May 9, 2002	37
SECTION I -	COMPLIANCE SCHEDULE	May 9, 2002	37

Permit Number: <u>V-99-023</u> **Page:** <u>1</u> **of** <u>36</u>

SECTION A - PERMIT AUTHORIZATIONError! Bookmark not defined.

Pursuant to a duly submitted application which was determined to be complete on December 11, 1997,the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in the Regulation 401 KAR 50:035, Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

Permit Number: <u>V-99-023</u> Page: <u>2</u> of <u>36</u>

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Group Requirements: Group 1

04(F04) Lead Glass Batch Weigh

Description:

The weighing of major ingredients for lead glass with a processing rate of 8.35 tons per hour or 22,128 tons per year. The control equipment is a dry dust collector. Construction commenced - August, 1985.

05(P05/F05) Lead Glass Batch Mixing

Description:

The mixing of ingredients for lead glass with a processing rate of 10.4 tons per hour or 30,000 tons per year. The control equipment is a dry dust collector. Construction commenced - August, 1985.

05(P05/F05) ESP Dust Recycling

Description:

The recycling of dust with a processing rate of 0.25 ton per hour or 2,100 tons per year. The control equipment is a dry dust collector. Construction commenced - August, 1985.

06(P06) <u>Litharge</u> <u>Pneumatic</u>

Description:

Conveying and loading of litharge for production of lead glass with a processing rate of 15.0 tons per hour. The control equipment is a dry dust collector. Construction commenced - September, 1985.

07(P07/F07) Conveyor Lead Glass Batch

Description:

The conveying of ingredients of lead glass with a processing rate of 16.8 tons per hour or 30,000 tons per year. The control equipment is a dry dust collector. Construction commenced - April, 1997.

13(P13/F13) Lead Glass Crusher

Description:

The crushing of lead glass with a processing rate of 20.0 tons per hour or 30,000 tons of lead glass per year. The control equipment is a baghouse. Construction commenced - August, 1976.

20(P20) Sludge Dryer

Description:

The dryer processes and dries various waste with a processing rate of 208 pounds per hour. The control equipment is a wet scrubber. Construction commenced - July, 1988.

Permit Number: <u>V-99-023</u> **Page:** <u>3</u> **of** <u>36</u>

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

21(F21) Glass Coating and Etching Operation

Description:

The process consists of coating lime and lead glass with sulfur dioxide and fluorides. The sulfur dioxide has a processing rate of 54.5 SCF per hour and 119,127 SCF per year. The difluoroethane injection has a processing rate of 0.8 pound per hour and 3.42 tons per year. The perfluoropropane injection has a processing rate of 0.4 pound per hour and 0.378 tons per year. The control equipment is the partial enclosure of the process. Construction commenced - June and August, 1989.

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations

1. **Operating Limitations:**

None.

2. Emission Limitations:

*See Group 2 for all toxic substance emissions.

Pursuant to Regulation 401 KAR 59:010:

- a) Visible emissions from each emission point listed in the above table shall not equal or exceed 20 percent opacity, as determined with Reference Method 9, Appendix A, 40 CFR 60.
- b) Hourly particulate emissions from each emission point listed in the above table as measured by Reference Method 5, Appendix A, 40 CFR 60, averaged over three hours shall not exceed each individual PM emission rate limit calculated by the following formula.

$$E = 3.59 P^{0.62}$$

Where P is the process weight (total weight of all materials introduced into each emission unit which may cause the emissions of particulate matter) in tons/hour. If the process weight equals or is less than 0.5 ton/hour, then the particulate matter emission rate shall not exceed 2.34 lbs./hr.

3. Testing Requirements:

None.

4. Specific Monitoring Requirements:

To provide reasonable assurance that visible emission limitations are met the permittee shall:

- i) Perform an annual opacity reading, or more frequent if requested by the Division, from each stack or vent using Reference Method 9. Opacity readings shall be conducted while the emission units are in operation
- ii) Perform a bi-weekly qualitative visual observation of the opacity of emissions from each stack/vent and maintain a log of the observation. The log shall note:
 - 1) Whether any air emissions (except for water vapor) were visible from the vent/stack,
 - 2) All emission points from which visible emissions occurred, and
 - 3) Whether the visible emissions were normal for the process.

Permit Number: <u>V-99-023</u> **Page:** <u>4</u> **of** <u>36</u>

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

iii) Determine the opacity of emissions by Reference Method 9 if visible emissions from any stack/vent is perceived or believed to exceed the applicable standard.

<u>Compliance Demonstration</u>: To provide reasonable assurance that the particulate matter emission limitations (TSP and PM_{10}) are being met, the permittee shall monitor the amount and type of process weight added to each particulate matter emissions unit. The process weight shall be determined as the average hourly tons added to the emission unit averaged over a one-month period. Average particulate emissions shall be calculated as follows:

$$PE = (PW \times PEF)$$

Where PE = Particulate emissions in lbs./hr, PW = process weight in tons/hr, and PEF = particulate emission factor in lbs./ton of process weight.

5. Specific Record Keeping Requirements:

Records shall be maintained of the bi-weekly, qualitative, and annual Reference Method 9 opacity readings and the amount of process weight processed by each emissions unit. These records shall be maintained for 5 years and made available for review upon request. Records shall be maintained of the process weight for the units in the above table.

6. Specific Reporting Requirements:

Any exceedance over the opacity or particulate matter emission limitations as stated in this permit shall be reported to the Division as specified in Section F (6). The company shall also certify to the Division, annually, that a bi-weekly visible emission survey is conducted and the specified records are being kept for these emission points. If more than two exceedances occur in any rolling six months, the owner or operator shall submit to the Division's Frankfort Regional Office a corrective action plan for the Division's approval on form DEP7007BB, no later than 30 days from the second exceedance.

7. Specific Control Equipment Operating Conditions:

See Section E.

Permit Number: <u>V-99-023</u> **Page:** <u>5</u> **of** <u>36</u>

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

02(P02A, P02/F02) <u>Lead Glass Melting Furnace</u>

Description:

A lead glass melting furnace with a processing rate of 4.5 tons per hour and 30,000 tons of glass pulled per year. The control equipment is a electrostatic precipitator. Construction commenced - 1972.

APPLICABLE REGULATIONS:

401 KAR 61:020, Existing process operations

1. **Operating Limitations:**

None.

2. Emission Limitations:

*See Group 2 for all toxic substance emissions.

Pursuant to Regulation 401 KAR 61:020:

- a) Visible emissions from each emission point listed in the above table shall not equal or exceed 40 percent opacity, as determined with Reference Method 9, Appendix A, 40 CFR 60.
- b) Hourly particulate emissions from each emission point listed in the above table as measured by Reference Method 5, Appendix A, 40 CFR 60, averaged over three hours shall not exceed each individual PM emission rate limit calculated by the following formula, unless otherwise specified.

$$E = 4.10 P^{0.67}$$

Where P is the process weight (total weight of all materials introduced into any emission unit which may cause the emissions of particulate matter) in tons/hour. If the process weight equals or is less than 0.5 ton/hour, then the particulate matter emission rate shall not exceed 2.58 lbs/hr or exceed the combined particulate emission limits.

Compliance Demonstration: To provide reasonable assurance that the particulate matter emission limitations (TSP and PM_{10}) are being met, the permittee shall monitor the amounts and types of process weights added to each emissions unit. The process weight shall be determined as the average hourly tons added to the emission unit averaged over a one-month period. Average particulate emissions shall be calculated as follows:

$$PE = (PW \times PEF)$$

Where PE = Particulate emissions in lbs./hr, PW = process weight in tons/hr, and PEF = particulate emission factor in lbs./ton of process weight.

3. Testing Requirements:

The permittee shall perform 2 compliance tests for PM, NO_x, SO₂, total fluorides, and lead during the lifetime of this permit. The first test is to be performed no later than 4 months after the permit is issued.

Permit Number: <u>V-99-023</u> **Page:** <u>6</u> **of** <u>36</u>

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

To provide reasonable assurance that the visible emission limitations are being met the permittee shall:

- i) Perform an annual opacity reading, or more frequent if requested by the Division, from each stack or vent using Reference Method 9. Opacity readings shall be conducted while the emission units are in operation.
- ii) Perform a weekly qualitative visual observation of the opacity of emissions from each stack/vent and maintain a log of the observation. The log shall note:
 - 1) Whether any air emissions (except for water vapor) were visible from the vent/stack,
 - 2) All emission points from which visible emissions occurred, and
 - 3) Whether the visible emissions were normal for the process.
- iii) Determine the opacity of emissions by Reference Method 9 if visible emissions from any stack/vent is perceived or believed to exceed the applicable standard.

5. Specific Record Keeping Requirements:

Records shall be maintained of the weekly, qualitative and annual Reference Method 9 opacity readings and the amount of process weight processed by each emissions unit. These records shall be maintained for 5 years and made available for review upon request. Records shall be maintained of the appropriate throughputs for the units in the above table.

6. Specific Reporting Requirements:

Any exceedance of the opacity or particulate matter emission limitations as stated in this permit shall be reported to the Division as specified in Section F (6). The company shall also certify to the Division, annually, that a weekly visible emission survey is conducted and the specified records are being kept for these emission points. If more than two exceedences of opacity or particulate matter emissions occur in any rolling six months, the owner or operator shall submit to the Division's Frankfort Regional Office a corrective action plan for the Division's approval on form DEP7007BB, no later than 30 days from the second exceedance.

7. Specific Control Equipment Operating Conditions:

See Section E.

Permit Number: <u>V-99-023</u> **Page:** <u>7</u> **of** <u>36</u>

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

01(P01) <u>Lime Glass Melting Furnace</u>

Description:

A lime glass melting furnace with a processing rate of 13 tons of glass pulled per hour and 105,000 tons glass pulled per year. The furnace shall operate at the lowest KW tested at or greater. No control equipment. Construction commenced - 1972.

APPLICABLE REGULATIONS:

401 KAR 61:020, Existing process operations

1. **Operating Limitations:**

None.

2. Emission Limitations:

*For toxic substance emissions see group 2.

Pursuant to Regulation 401 KAR 61:020:

- a) Visible emissions shall not equal or exceed 40 percent opacity, as determined with Reference Method 9, Appendix A, 40 CFR 60.
- b) To preclude the applicablity of 401 KAR 51:017
 PM and PM₁₀ emissions shall not exceed a maximum of 15.6 lbs/hr (63.0 TPY) and 13.7 lbs./hr (55.2 TPY), respectively based upon a 3-hour average.
 SO₂, and NO_x emissions shall not exceed a maximum of 42.9 lbs/hr (174 TPY) and 154 lbs/hr (621 TPY), respectively, based upon a 24-hour average.

Compliance Demonstration:

PM emission rate(lb/hour)

PM= {tons of glass pulled in that calendar month x emission factor determined from stack test data (lbs/ton) / hours of operation in that calendar month}

The 12 month rolling average of PM shall be calculated using the following equation:

$$PM(TPY) = \left[\sum_{i=1}^{n} \frac{TG \times EF \times 8760}{MH \times 2000}\right]$$

Where n is the number of months, TG is the tons of glass pulled in that month, EF is the emission factor in lbs/ton, and MH is the monthly hours of operation.

PM₁₀ emission rate (lb/hour)

= [tons of glass pulled in that calendar month x emission factor determined from stack test data (lbs/ton) / hours of operation in that calendar month]

The 12 month rolling average of PM₁₀ shall be calculated using the following equation:

$$PM_{10}(TPY) = [\sum_{i=1}^{n} \frac{TG \times EF \times 8760}{MH \times 2000}]$$

Where is the number of months, TG is the tons of glass pulled in that month, EF is the emission factor in lbs/ton, and MH is the monthly hours of operation.

Permit Number: <u>V-99-023</u> **Page:** <u>8</u> **of** <u>36</u>

SECTION B - EMISSION POINTS, EMISSON UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Sulfur Dioxide:

Lb/hr limit:

$$SO = \frac{S \times F \times EF}{DH}$$

Where S is the sulfur content in the raw material feed rate, F is the raw material feed rate in tons per hour, EF is the stack test emission factor in lbs/ton, and DH is the monthly hours of operation.

Ton/year limit:

$$SO_a = \sum_{i=1}^{n} \frac{S \times F \times EF \times 8760}{MH \times 2000}$$

Where n is the number of months, S is the sulfur content in the raw material feed rate, F is the monthly raw material feed rate, EF is the stack test emission factor, and MH is the monthly hours of operation.

Nitrogen oxides:

Lb/hr limit:

$$NO = \frac{TG \times EF}{DH}$$

Where TG is the tons of glass pulled that month, EF is the stack test emission factor, and DH is the monthly hours of operation.

Tons/year limit:

$$NO_a = \sum_{i=1}^{n} \frac{TG \times EF \times 8760}{MH \times 2000}$$

Where n is the number of months, TG is the tons of glass pulled that month, EF is the stack test emission factor, and MH is the monthly hours of operation.

3. <u>Testing Requirements</u>:

The permittee shall perform compliance tests for the above pollutants twice within the lifetime of this permit.

4. Specific Monitoring Requirements:

To provide reasonable assurance that visible emission limitations are met the permittee shall:

- i) Perform an annual opacity reading, or more frequent if requested by the Division, from each stack or vent using Reference Method 9. Opacity readings shall be conducted while the emission units are in operation
- ii) Perform a weekly qualitative visual observation of the opacity of emissions from each stack/vent and maintain a log of the observation. The log shall note:
 - 1) Whether any air emissions (except for water vapor) were visible from the vent/stack,
 - 2) All emission points from which visible emissions occurred, and
 - 3) Whether the visible emissions were normal for the process.
- iii) Determine the opacity of emissions by Reference Method 9 if visible emissions from any stack/vent is perceived or believed to exceed the applicable standard.

Permit Number: <u>V-99-023</u> Page: <u>9</u> of <u>36</u>

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

The permittee shall also monitor the daily glass production rate, hours of operation of the furnace, the amount of each raw material feed to the furnace daily, the amount of sulfur fed to the furnace, and the amount of natural gas/propane burned on a daily basis

5. Specific Record Keeping Requirements:

Records shall be maintained of the weekly qualitative, annual Reference Method 9 opacity readings, daily glass production rate, raw material feed rate, amount of sulfur fed into the furnace, the amount of natural gas/propane burned and hours of operation

6. Specific Reporting Requirements:

Any exceedance over the opacity or particulate matter emission limitations as stated in this permit shall be reported to the Division as specified in Section F (6). The company shall also certify to the Division, annually, that a weekly visible emission survey is conducted and the specified records are being kept for these emission points. If more than two exceedances occur in any rolling six months, the owner or operator shall submit to the Division's Frankfort Regional Office a corrective action plan for the Division's approval on form DEP7007BB, no later than 30 days from the second exceedance.

7. Specific Control Equipment Operating Conditions:

See Section E.

Permit Number: <u>V-99-023</u> **Page:** <u>10</u> **of** <u>36</u>

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

03(F03) Raw Material Unloading

Description:

Unloading of the raw material with a processing rate of 100.0 tons per hour and 106,411 tons per year. The control equipment is a partial enclosure of the operation and a pneumatic line. Construction commenced - 1972.

03(F03) Raw Material Storage Silos

Description:

Storage of the raw material with a processing rate of 100.0 tons per hour and 106,411 tons per year. The control equipment is a dry dust collector. Construction commenced - 1972.

APPLICABLE REGULATIONS:

401 KAR 61:020, Existing process operations

1. Operating Limitations:

None.

2. Emission Limitations:

Pursuant to Regulation 401 KAR 61:020:

- a) Visible emissions shall not equal or exceed 40 percent opacity, as determined with Reference Method 9, Appendix A, 40 CFR 60.
- b) To preclude 401 KAR 51:017:

Combined PM shall not exceed 13.5 lb/hr and 7.18 tons/year

Combined PM₁₀ shall not exceed 6.75 lb/hr and 3.59 tons/year

Compliance Demonstation:

PM compliance shall be demonstrated using the following equations:

Lb/hr limit:

$$PM = [(RM \times EF)/MH] \times (1-0.99)$$

Where RM is the monthly tons of raw material used, EF is the emission factor(13.5 lb/ton), and MH is the monthly hours of operation

Tons/year:

$$PM = \sum_{i=1}^{n} \frac{RM \times EF \times 0.01 \times 8760}{MH \times 2000}$$

Where the tons per year are obtained by summing the monthly averages and converting from lb/hr to ton per year.

PM₁₀ compliance shall be demonstrated using the following equations:

Lb/hr:

$$PM_{10} = [(RM \times EF)/MH] \times (1-0.99)$$

Where RM is the monthly tons of raw material used, EF is the emission factor(6.75 lb/ton), and MH is the monthly hours of operation

Permit Number: <u>V-99-023</u> **Page:** <u>11</u> **of** <u>36</u>

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Tons/year:

$$PM_{10} = \sum_{i=1}^{n} \frac{RM \times EF \times 0.01 \times 8760}{MH \times 2000}$$

Where the tons per year are obtained by summing the monthly averages and converting from lb/hr to ton per year.

3. <u>Testing Requirements</u>:

None.

4. Specific Monitoring Requirements:

To provide reasonable assurance that the visible emission limitations are being met the permittee shall:

- i) Perform an annual opacity reading, or more frequent if requested by the Division, from each stack or vent using Reference Method 9. Opacity readings shall be conducted while the emission units are in operation.
- ii) Perform a bi-weekly qualitative visual observation of the opacity of emissions from each stack/vent and maintain a log of the observation. The log shall note:
 - 1) Whether any air emissions (except for water vapor) were visible from the vent/stack.
 - 2) All emission points from which visible emissions occurred, and
 - 3) Whether the visible emissions were normal for the process.
- iii) Determine the opacity of emissions by Reference Method 9 if visible emissions from any stack/vent is perceived or believed to exceed the applicable standard.

5. Specific Record Keeping Requirements:

Records shall be maintained of the bi-weekly qualitative and annual Reference Method 9 opacity readings, the monthly amount of raw material handled, and the hours of operation. Records shall also be maintained of the maintenance and operation of the control equipment.

6. Specific Reporting Requirements:

Any exceedance of the opacity or particulate matter emission limitations as stated in this permit shall be reported to the Division as specified in Section F (6). The company shall also certify to the Division, annually, that a bi-weekly visible emission survey is conducted and the specified records are being kept for these emission points. If more than two exceedences of opacity or particulate matter emissions occur in any rolling six months, the owner or operator shall submit to the Division's Frankfort Regional Office a corrective action plan for the Division's approval on form DEP7007BB, no later than 30 days from the second exceedance.

7. Specific Control Equipment Operating Conditions:

The control equipment shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices. See Section E for further details.

Permit Number: <u>V-99-023</u> Page: <u>12</u> of <u>36</u>

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

08(P04) <u>Lime Glass Batch Weigh</u>

Description:

The weighing of major ingredients for lime glass with a processing rate of 30.9 tons per hour and 94,091 tons per year. The control equipment is a dry dust collector. Construction commenced - August, 1985.

08(P05/F05) <u>Lime Glass Batch Mixing</u>

Description:

The mixing of ingredients for lime glass with a processing rate of 30.9 tons per hour and 119,318 tons per year. The control equipment is a dry dust collector. Construction commenced - August, 1985.

08(P08) Conveyor Lime Glass Batch

Description:

The conveying of lime glass with a processing rate of 38.7 tons per hour and 119,318 tons lime glass per year. The control equipment is a dry dust collector. Construction commenced - August, 1985.

08(F16) <u>Minor Ingredients Loading</u>

Description:

The loading of minor ingredients into the batch mixes with a processing rate of 0.57 ton per hour and 5,026 tons per year. The control equipment is partial enclosure of process and vents. Construction commenced – August, 1985.

08(F16) <u>Lime Furnace Feed Hopper</u>

Description:

The loading of materials into the lime furnace. The control equipment is partial enclosure and fabric fitlers. Construction commenced – August, 1985.

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations

1. Operating Limitations:

None.

2. Emission Limitations:

Pursuant to Regulation 401 KAR 59:010:

- a) Visible emissions from each emission point listed above shall not equal or exceed 20 percent opacity, as determined with Reference Method 9, Appendix A, 40 CFR 60.
- b) To preclude the applicability of 401 KAR 51:017:
 - Combined PM shall not exceed 1.02 pounds per hour and 1.83 tons per year.
 - Combined PM₁₀ shall not exceed 0.51 lb/hr and 0.92 tons per year.

Permit Number: <u>V-99-023</u> **Page:** <u>13</u> **of** <u>36</u>

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Compliance Demonstration:

To demonstrate compliance for PM the following equations will be used:

Lb/hr limit:

 $PM = [(RM \times EF)/MH] \times (1-0.99)$

Where RM is the monthly tons of raw material used, EF is the emission factor (2.63 lb/ton), and MH is the monthly hours of operation

Tons/year:

$$PM = \sum_{i=1}^{n} \frac{RM \times EF \times 0.01 \times 8760}{MH \times 2000}$$

Where the tons per year are obtained by summing the monthly averages and converting from lb/hr to ton per year.

PM₁₀ compliance shall be demonstrated using the following equations:

Lb/hr:

$$PM_{10} = [(RM \times EF)/MH] \times (1-0.99)$$

Where RM is the monthly tons of raw material used, EF is the emission factor(1.31 lb/ton), and MH is the monthly hours of operation

Tons/year:

$$PM_{10} = \sum_{i=1}^{n} \frac{RM \times EF \times 0.01 \times 8760}{MH \times 2000}$$

Where the tons per year are obtained by summing the monthly averages and converting from lb/hr to ton per year.

3. Testing Requirements:

None.

4. Specific Monitoring Requirements:

To provide reasonable assurance that visible emission limitations are met the permittee shall:

- i) Perform an annual opacity reading, or more frequent if requested by the Division, from each stack or vent using Reference Method 9. Opacity readings shall be conducted while the emission units are in operation
- ii) Perform a bi-weekly qualitative visual observation of the opacity of emissions from each stack/vent and maintain a log of the observation. The log shall note:
 - 1) Whether any air emissions (except for water vapor) were visible from the vent/stack,
 - 2) All emission points from which visible emissions occurred, and
 - 3) Whether the visible emissions were normal for the process.
- iii) Determine the opacity of emissions by Reference Method 9 if visible emissions from any stack/vent is perceived or believed to exceed the applicable standard.

5. Specific Record Keeping Requirements:

Records shall be maintained of the following:

a) weekly qualitative and annual Reference Method 9 opacity readings

Permit Number: <u>V-99-023</u> **Page:** <u>14</u> **of** <u>36</u>

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- b) amount of raw material handled and hours of operation
- c) Monthly calculations and records of PM and PM₁₀ emissions.

6. Specific Reporting Requirements:

Any exceedance over the opacity or particulate matter emission limitations as stated in this permit shall be reported to the Division as specified in Section F (6). The company shall also certify to the Division, annually, that a weekly visible emission survey is conducted and the specified records are being kept for these emission points. If more than two exceedences occur in any rolling six months, the owner or operator shall submit to the Division's Frankfort Regional Office a corrective action plan for the Division's approval on form DEP7007BB, no later than 30 days from the second exceedance.

7. Specific Control Equipment Operating Conditions:

The control equipment shall be operated as necessary to maintain compliance with the permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating procedure. Records of the operation and maintenance of the control equipment shall be maintained. See Section E for further requirements.

Permit Number: <u>V-99-023</u> **Page:** <u>15</u> **of** <u>36</u>

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

09(F14) Lime Glass Crusher

Description:

The crushing of lime glass with a processing rate of 27.3 tons per hour and 51,545 tons per year. The control equipment is the enclosure of the process. Construction commenced - October, 1972.

09(P22) Lime Glass Cullet Handling

Description:

The moving of the crushed lime glass with a processing rate of 20.0 tons per hour and 68,000 tons per year. The control equipment is a dry dust collector. Construction commenced - 1972.

09(F46) Basement Cullet Handling # 1

Description:

Construction commenced - October, 1972.

09(P48) <u>Lime Glass Cullet Storage Pile</u>

Description:

The outside storage pile of cullet. Construction commenced - 1972.

APPLICABLE REGULATIONS:

401 KAR 61:020, Existing process operations

1. Operating Limitations:

None.

2. <u>Emission Limitations</u>:

*See Group 2 for toxic substance emissions.

Pursuant to Regulation 401 KAR 61:020:

- a) Visible emissions from each emission point listed in the above table shall not equal or exceed 40 percent opacity, as determined with Reference Method 9, Appendix A, 40 CFR 60.
- b) Hourly particulate emissions from each emission point listed in the above table as measured by Reference Method 5, Appendix A, 40 CFR 60, averaged over three hours shall not exceed each individual PM emission rate limit calculated by the following formula, unless otherwise specified.

Permit Number: <u>V-99-023</u> **Page:** <u>16</u> **of** <u>36</u>

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

$$E = 4.10 P^{0.67}$$

Where P is the process weight (total weight of all materials introduced into any emission unit which may cause the emissions of particulate matter) in tons/hour. If the process weight equals or is less than 0.5 ton/hour, then the particulate matter emission rate shall not exceed 2.58 lbs/hr or exceed the combined particulate emission limits.

<u>Compliance</u> <u>Demonstration</u>: To provide reasonable assurance that the particulate matter emission limitations (TSP and PM_{10}) are being met, the permittee shall monitor the amounts and types of process weights added to each emissions unit. The process weight shall be determined as the average hourly tons added to the emission unit averaged over a one-month period. Average particulate emissions shall be calculated as follows:

$$PE = (PW \times PEF)$$

Where PE = Particulate emissions in lbs./hr, PW = process weight in tons/hr, and PEF = particulate emission factor in lbs./ton of process weight.

3. Testing Requirements:

None.

4. Specific Monitoring Requirements:

To provide reasonable assurance that the visible emission limitations are being met the permittee shall:

- i) Perform an annual opacity reading, or more frequently if requested by the Division, from each stack or vent using Reference Method 9. Opacity readings shall be conducted while the emission units are in operation.
- ii) Perform a weekly qualitative visual observation of the opacity of emissions from each stack/vent and maintain a log of the observation. The log shall note:
 - 1) Whether any air emissions (except for water vapor) were visible from the vent/stack.
 - 2) All emission points from which visible emissions occurred, and
 - 3) Whether the visible emissions were normal for the process.
- iii) Determine the opacity of emissions by Reference Method 9 if visible emissions from any stack/vent is perceived or believed to exceed the applicable standard.

5. Specific Record Keeping Requirements:

Records shall be maintained of the weekly, qualitative and annual Reference Method 9 opacity readings and the amount of process weight processed by each emissions unit. These records shall be maintained for 5 years and made available for review upon request. Records shall be maintained of the appropriate throughputs for the units in the above table.

Permit Number: <u>V-99-023</u> **Page:** <u>17</u> **of** <u>36</u>

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:

Any exceedance of the opacity or particulate matter emission limitations as stated in this permit shall be reported to the Division as specified in Section F (6). The company shall also certify to the Division, annually, that a weekly visible emission survey is conducted and the specified records are being kept for these emission points. If more than two exceedences of opacity or particulate matter emissions occur in any rolling six months, the owner or operator shall submit to the Division's Frankfort Regional Office a corrective action plan for the Division's approval on form DEP7007BB, no later than 30 days from the second exceedance.

7. Specific Control Equipment Operating Conditions:

See Section E.

Permit Number: V-99-023 **Page:** <u>18</u> **of** <u>36</u>

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

15(P15A/F15B, P15/F15) <u>Lime Glass Tube ETC Coating</u> Description:

The coating of lime glass and the finishing ovens with a processing rate of 27.4 pounds per hour and 84 tons per year. The control equipment is a wet scrubber and a wet electrostatic precipitator. Construction commenced - January, 1985, and January, 1986.

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations

1. Operating Limitations:

None.

2. Emission Limitations:

*See Group 2 for toxic substance emissions.

Pursuant to Regulation 401 KAR 59:010:

- a) Visible emissions from each emission point listed in the above table shall not equal or exceed 20 percent opacity, as determined with Reference Method 9, Appendix A, 40 CFR 60.
- b) Hourly particulate emissions from each emission point listed in the above table as measured by Reference Method 5, Appendix A, 40 CFR 60, averaged over three hours shall not exceed each individual PM emission rate limit calculated by the following formula.

$$E = 3.59 P^{0.62}$$

Where P is the process weight (total weight of all materials introduced into each emission unit which may cause the emissions of particulate matter) in tons/hour. If the process weight equals or is less than 0.5 ton/hour, then the particulate matter emission rate shall not exceed 2.34 lbs./hr.

3. Testing Requirements:

Compliance testing for PM shall be performed twice during the lifetime of this permit. The first test shall be performed not more than 4 months after permit issuance.

4. Specific Monitoring Requirements:

To provide reasonable assurance that visible emission limitations are met the permittee shall:

- i) Perform an annual opacity reading, or more frequent if requested by the Division, from each stack or vent using Reference Method 9. Opacity readings shall be conducted while the emission units are in operation
- ii) Perform a weekly qualitative visual observation of the opacity of emissions from each stack/vent and maintain a log of the observation. The log shall note:
 - 1) Whether any air emissions (except for water vapor) were visible from the vent/stack,
 - 2) All emission points from which visible emissions occurred, and
 - 3) Whether the visible emissions were normal for the process.

Permit Number: V-99-023 **Page:** 19 of 36

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

iii) Determine the opacity of emissions by Reference Method 9 if visible emissions from any stack/vent is perceived or believed to exceed the applicable standard.

<u>Compliance Demonstration</u>: To provide reasonable assurance that the particulate matter emission limitatio emission unit averaged over a one-month period. Average particulate emissions shall be calculated as follows:

$$PE = (PW \times PEF)$$

Where PE = Particulate emissions in lbs./hr, PW = process weight in tons/hr, and PEF = particulate emission factor in lbs./ton of process weight.

5. Specific Record Keeping Requirements:

Records shall be maintained of the weekly, qualitative, and annual Reference Method 9 opacity readings and the amount of process weight processed by each emissions unit. These records shall be maintained for 5 years and made available for review upon request. Records shall be maintained of the process weight for the units in the above table.

6. Specific Reporting Requirements:

Any exceedance over the opacity or particulate matter emission limitations as stated in this permit shall be reported to the Division as specified in Section F (6). The company shall also certify to the Division, annually, that a weekly visible emission survey is conducted and the specified records are being kept for these emission points. If more than two exceedences occur in any rolling six months, the owner or operator shall submit to the Division's Frankfort Regional Office a corrective action plan for the Division's approval on form DEP7007BB, no later than 30 days from the second exceedance.

7. Specific Control Equipment Operating Conditions:

See Section E.

Permit Number: <u>V-99-023</u> **Page:** <u>20</u> **of** <u>36</u>

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Group Requirements: Group 2 Sourcewide Toxic Emissions

01(P01) <u>Lime Glass Melting Furnace</u>

Description:

A lime glass melting furnace with a maximum processing rate of 13.0 tons of glass pulled per hour and 105,000 tons glass pulled per year. No control equipment. Construction commenced - 1972.

02(P02A, P02/F02) <u>Lead Glass Melting Furnace</u>

Description:

A lead glass melting furnace with a processing rate of 4.50 tons per hour and 30,000 tons of glass pulled per year. The control equipment is a electrostatic precipitator. Construction commenced - 1972.

04(F04) Lead Glass Batch Weigh

Description:

The weighing of major ingredients for lead glass with a processing rate of 8.35 tons per hour and 22,128 tons per year. The control equipment is a dry dust collector. Construction commenced - August, 1985.

05(P05/F05) Lead Glass Batch Mixing

Description:

The mixing of ingredients for lead glass with a processing rate of 10.4 tons per hour and 30,000 tons per year. The control equipment is a dry dust collector. Construction commenced - August, 1985.

05(P05/F05) ESP Dust Recycling

Description:

The recycling of dust with a processing rate of 0.25 ton per hour and 2,100 tons per year. The control equipment is a dry dust collector. Construction commenced - August, 1985.

06(P06) Litharge Pneumatic

Description:

Conveying and loading of litharge for production of lead glass with a processing rate of 15.0 tons per hour. The control equipment is a dry dust collector. Construction commenced - September, 1985.

07(P07/F07) Conveyor Lead Glass Batch

Description:

The conveying of ingredients of lead glass with a processing rate of 16.8 tons per hour and 30,000 tons per year. The control equipment is a dry dust collector. Construction commenced - April, 1997.

Permit Number: <u>V-99-023</u> Page: <u>21</u> of <u>36</u>

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

08(P04) Lime Glass Batch Weigh

Description:

The weighing of major ingredients for lime glass with a processing rate of 30.9 tons per hour and 94,091 tons per year. The control equipment is a dry dust collector. Construction commenced - August, 1985.

08(F16) Minor Ingredients Loading

Description:

The loading of minor ingredients into the batch mixes with a processing rate of 0.57 ton per hour and 5,026 tons per year. The control equipment is partial enclosure of process and vents. Construction commenced - 1972.

08(P05/F05) Lime Glass Batch Mixing

Description:

The mixing of ingredients for lime glass with a processing rate of 30.9 tons per hour and 119,318 tons per year. The control equipment is a dry dust collector. Construction commenced - August, 1985.

08(P08) Conveyor Lime Glass Batch

Description:

The conveying of lime glass with a processing rate of 38.7 tons per hour and 119,318 tons lime glass per year. The control equipment is a dry dust collector. Construction commenced - August, 1985.

09(F14) <u>Lime Glass Crusher</u>

Description:

The crushing of lime glass with a processing rate of 27.30 tons per hour and 51,545 tons lime glass per year. The control equipment is the enclosure of the process. Construction commenced - October, 1978.

13(P13/F13) Lead Glass Crusher

Description:

The crushing of lead glass with a processing rate of 20.0 tons per hour and 30,000 tons of lead glass per year. The control equipment is a baghouse. Construction commenced - August, 1976.

15(P15A/F15B, P15/F15) Lime Glass Tube ETC Coating

Description:

The coating of lime glass and the finishing ovens with a processing rate of 27.4 pounds per hour and 84 tons per year. The control equipment is a wet scrubber and a wet electrostatic precipitator. Construction commenced - January, 1985, and January, 1986.

APPLICABLE REGULATIONS:

401 KAR 63:021, Existing sources emitting toxic air pollutants

Permit Number: <u>V-99-023</u> Page: <u>22</u> of <u>36</u>

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

1. **Operating Limitations:**

None.

2. Emission Limitations:

Lead emissions from the source shall not exceed 2.77 lbs/hr. Antimony emissions from the source shall not exceed 9.44 lbs/hr.

3. Testing Requirements:

None.

4. Specific Monitoring Requirements:

Lead and antimony throughputs shall be monitored as follows:

Emission rate of pollutant (lb/hr)= Controlled emission factor (lb/lb or lb/ton) * Throughput (lbs or tons) / 8-hour period

5. **Specific Record Keeping Requirements:**

Records of the lead and antimony percent content in the input materials, throughputs of process materials, and emission rates shall be maintained by the permittee.

Specific Reporting Requirements:

Lead and antimony emission exceedences shall be reported to the Division as specified in Section F(6).

7. Specific Control Equipment Operating Conditions:

See Section E.

Permit Number: <u>V-99-023</u> **Page:** <u>23</u> **of** <u>36</u>

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to Regulation 401 KAR 50:035, Section 5(4). While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

	Description	Generally Applicable Regulations
1.	Forehearth 221- Burning natural gas or propane (F23)	None
2.	Flame Polishers 221A (F24)	None
3.	Flame Polishers 221B (F25)	None
4.	Forehearth 222 – Burning natural gas or propane (F26)	None
5.	Flame Polishers 222D (F27)	None
6.	Flame Polishers 222C (F28)	None
7.	Forehearth 223 – Burning natural gas or propane (F29)	401 KAR 59:010
8.	Forehearth 224 – Burning natural gas or propane (F31)	401 KAR 59:010
9.	Flame Polishers 223 (F30)	401 KAR 59:010
10.	Forehearth 232 – Burning natural gas or propane (F32)	None
11.	Flame Polishers 232 (F34)	None
12.	Forehearth 233 – Burning natural gas or propane (F33)	None
13.	Flame Polishers 233 (F35)	None
14.	Old Twin Tube (F36)	401 KAR 59:010
15.	Cigar Machine (F37)	401 KAR 59:010
16.	Exhaust Machines (#8, #7, #6, #5, #3, #1) (F38)	401 KAR 59:010
17.	Circleline Machine (F39)	401 KAR 59:010
18.	Electrode (F43)	401 KAR 59:010
19.	Horizontal #1 (F44)	401 KAR 59:010
20.	Horizontal #2 (F45)	401 KAR 59:010
21.	Splitter / Trimmer (F40)	401 KAR 59:010
22.	North Twin Tube (F41)	401 KAR 59:010
23.	South Twin Tube (F42)	401 KAR 59:010

Permit Number: <u>V-99-023</u> **Page:** <u>24</u> **of** <u>36</u>

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

	Description	Generally Applicable Regulations
24.	Two Diesel Storage Tanks (F54)	None
25.	Two Fuel Oil Storage Tanks (F55)	401 KAR 59:010
26.	Cooling Tower #1 (F51)	401 KAR 59:010
27.	Cooling Tower #2 (F51)	401 KAR 59:010
28.	Cooling Tower #3 (F51)	401 KAR 59:010
29.	Propane Storage Tanks	None
30.	Lab Hoods	401 KAR 59:010
31.	Sand Blasting Room	401 KAR 59:010
32.	ETC Loading Losses & ETC Coating Storage Tank (F56)	401 KAR 59:010
33.	Parts Washing (F57)	401 KAR 59:010
34.	Wastewater Treatment Plant (F55)	401 KAR 59:010
35.	Three Diesel Emergency Generators (F59)	None
36.	Forehearth 225- Burning natural gas or propane (F60)	401 KAR 59:010
37.	2 Exhaust Tube Siliconizer rated 0.3 liter/hour	401 KAR 59:010
38.	Exhaust Tube Siliconizer rated 0.2 liter/hour	401 KAR 59:010
39.	2 Flame Polishers	401 KAR 59:010

Permit Number: <u>V-99-023</u> Page: <u>25</u> of <u>36</u>

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

- 1. Pursuant to 401 KAR 63:021, source wide lead and antimony emissions shall not exceed 2.77 lbs/hr and 9.44 lbs/hr, respectively.
- 2. PM, PM10, SO_2 , and NO_x emissions, as measured by methods referenced in 401 KAR 50:015, Section 1, shall not exceed the respective limitations specified herein.
- 3. Compliance with annual emissions and processing limitations imposed pursuant to 401 KAR 50:035, Section 7(1)(a), and contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

Permit Number: <u>V-99-023</u> **Page:** <u>26</u> **of** <u>36</u>

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

Permit Number: <u>V-99-023</u> Page: <u>27</u> of <u>36</u>

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

- 1. When continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a. Date, place as defined in this permit, and time of sampling or measurements.
 - b. Analyses performance dates;
 - c. Company or entity that performed analyses;
 - d. Analytical techniques or methods used;
 - e. Analyses results; and
 - f. Operating conditions during time of sampling or measurement.

[Material incorporated by reference by 401 KAR 52:020, Section 1b (IV)1

- 2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality. [Material incorporated by reference by 401 KAR 52:020, Sections 1b(IV) 2 and 1a(8)]
- 3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control quipment), practice, or operation;
 - b. To access and copy any records required by the permit:
 - c. Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit. Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
 - d. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.
 - e. Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
- 4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
- 5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation.

[Material incorporated by reference by 401 KAR 52:020, Section 1b (V)1.]

Permit Number: <u>V-99-023</u> Page: <u>28</u> of <u>36</u>

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

- 6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. All deviations from permit requirements shall be clearly identified in the reports.
- 7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards notification shall be made as promptly as possible by telephone (or other electronic media) and shall cause written notice upon request.
- 8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by Section F.6. [Material incorporated by reference by 401 KAR 52:020, Section 1b V 3, 4.]
- 9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
 - a. Identification of the term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period, and
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

Permit Number: <u>V-99-023</u> **Page:** <u>29</u> **of** <u>36</u>

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality Frankfort Regional Office 643 Teton Trail, Suite B Frankfort, KY 40601 U.S. EPA Region IV Air Enforcement Branch Atlanta Federal Center 61 Forsyth St.

Atlanta, GA 30303-8960

Division for Air Quality Central Files 803 Schenkel Lane Frankfort, KY 40601

- 10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.
- 11. Pursuant to Section VII.3 of the policy manual of the Division for Air Quality as referenced in 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the division by the source or its representative within forty-five days after the completion of the fieldwork.

Permit Number: <u>V-99-023</u> **Page:** <u>30</u> **of** <u>36</u>

SECTION G - GENERAL PROVISIONS

- (a) General Compliance Requirements
- 1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including termination, revocation and reissuance, revision or denial of a permit. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 3]
- 2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 6]
- 3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - a. If additional requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
 - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
 - d. If any additional applicable requirements of the Acid Rain Program become applicable to the source. [Acid Rain sources only]

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the division may provide a shorter time period in the case of an emergency.

- 3. The permittee shall furnish information upon requested by the cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the permit. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 7,8]
- 4. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority. [Material incorporated by reference by 401 KAR 52:020, Section 7(1)]

Permit Number: <u>V-99-023</u> **Page:** <u>31</u> **of** <u>36</u>

SECTION G - GENERAL PROVISIONS (CONTINUED)

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 14]

- 7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 4]
- 8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 15)b]
- 9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6). [Material incorporated by reference by 401 KAR 52:020, Section 1a, 10]
- 10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [401 KAR 52:020, Section 11(3)(b)]
- 11. This permit does not convey property rights or exclusive privileges. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 9]
- 12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.
- 13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry. [401 KAR 52:020, Section 11(3)(d)].
- 14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders. [401 KAR 52:020, Section 11(3)(a)]
- 15. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source
- 16. Permit Shield A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of a permit shall be considered compliance with:
 - (a) Applicable requirements that are included and specifically identified in the permit and
 - (b) Non-applicable requirements expressly identified in this permit.

Permit Number: <u>V-99-023</u> **Page:** <u>32</u> **of** <u>36</u>

SECTION G - GENERAL PROVISIONS (CONTINUED)

(b) <u>Permit Expiration and Reapplication Requirements</u>

- 1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the division. [401 KAR 52:020, Section 12]
- 2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the division after the completeness determination has been made on any application, by whatever deadline the division sets. [401 KAR 52:030 Section 8(2)]

(c) Permit Revisions

- 1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
- 2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements

- 1. Construction of process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
- 2. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the division's Frankfort Central Office, notification of the following:
 - a. The date when construction commenced.
 - b. The date of start-up of the affected facilities listed in this permit.
 - c. The date when the maximum production rate specified in the permit application was achieved.

Permit Number: <u>V-99-023</u> **Page:** <u>33</u> **of** <u>36</u>

SECTION G - GENERAL PROVISIONS (CONTINUED)

3. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the cabinet may extend these time periods if the source shows good cause.

- 4. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the cabinet.
- 5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements.
- 6. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.
- 7. Pursuant to Section VII 2.(1) of the policy manual of the Division for Air Quality as referenced by 401 KAR 50:016, Section 1.(1), at least one month prior to the date of the required performance test, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the division's Frankfort Central Office. Pursuant to 401 KAR 50:045, Section 5, the division shall be notified of the actual test date at least ten (10) days prior to the test. (Use only if testing is required)

(e) <u>Acid Rain Program Requirements</u>

If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

Permit Number: <u>V-99-023</u> **Page:** <u>34</u> **of** <u>36</u>

SECTION G - GENERAL PROVISIONS (CONTINUED)

(f) Emergency Provisions

1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:

- a. An emergency occurred and the permittee can identify the cause of the emergency;
- b. The permitted facility was at the time being properly operated;
- c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
- d. Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations are exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
- e. This requirement does not relieve the source from other local, state or federal notification requirements.
- 2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement. [401 KAR 52:020, Section 24(3)]
- 3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [401 KAR 52:020, Section 24(2)]

(g) Risk Management Provisions

The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center P.O. Box 3346 Merrifield, VA, 22116-3346

- 2. If requested, submit additional relevant information to the division or the U.S. EPA.
- (h) Ozone depleting substances
- 1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.

Permit Number: V-99-023 Page: 35 of 36

SECTION G - GENERAL PROVISIONS (CONTINUED)

b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.

- c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
- d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
- e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
- f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- 2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

Permit Number: <u>V-99-023</u> **Page:** <u>36</u> **of** <u>36</u>

SECTION H - ALTERNATE OPERATING SCENARIOS

None

SECTION I - COMPLIANCE SCHEDULE

None

SECTION J - ACID RAIN

None